GRAPHTEC

ROBO Master

USER'S MANUAL

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1 Introduction

This ROBO Master software is editing/output software that enables the creation of outline data consisting of simple objects and text, and the output of the created data to the Craft ROBO. Furthermore, it supports convenient functions that enable the capturing of image data into the software and the automatic creation of registration marks for Print & Cut applications.

1.1 Features

ROBO Master has the following features:

(1) Supports a function for automatically creating registration marks.

(2) Provides a preview display of a printing image, cutting image, or their superimposed images.

(3) Can load DXF files in AutoCAD R13 format.

(4) Allows the selection of whether or not to output for each color when outputting to the Craft ROBO.

(5) To facilitate weeding of the cut media, the Weed Border cutting function enables automatic output of a border when outputting to the Craft ROBO.

(6) Any object exceeding the Craft ROBO's cutting range can be output in multiple pages using the Tiling function when outputting to the Craft ROBO.

1.2 System Requirements

The minimum system requirements to run the software are as follows.

- Operating System: Windows 98 Second Edition/Windows Me/Windows 2000/Windows XP
- CPU: Pentium III 600 MHz or higher
- Memory: 128 MB or more (at least 256 MB recommended)
- Monitor: 1024 x 768 High color (True Color recommended)
- Mouse
- Supported plotter (when cutting): Craft ROBO (CC100-20)
- Supported printers (when printing): Windows-compatible printers (inkjet printers recommended)

1.3 Usage Precautions

- Only the following DXF objects can be loaded: Lines, polylines, splines, circles, arcs, and ellipses. Block-referenced objects or splines, text, and dimension lines cannot be loaded.
- For details on setting and operating the Craft ROBO, please refer to the Craft ROBO user's manual.

*** All screens shown in this manual are those of Windows 2000.**

2 Installing ROBO Master

2.1 Starting Up the Start Window

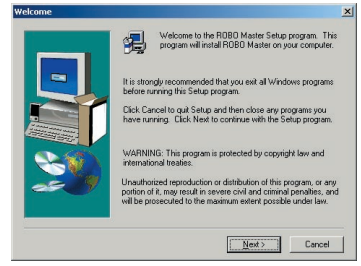
Insert the CD included with the Craft ROBO into your computer's CD drive. The [Start] window shown below will be displayed. If this window is not displayed, open "My Computer" and double-click "CD Drive". If the window still does not appear, execute "MultiSetup.exe" included in the CD-ROM.

2.2 Installing ROBO Master

Click "Setup Craft ROBO" in the [Start] window to launch the ROBO Master installer.

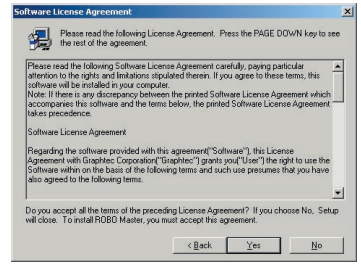
Installation procedure

(1) When the installer is started up, the screen shown below is displayed first.


Welcome
Welcome to the ROBO Master Setup program. This program will install ROBO Master on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

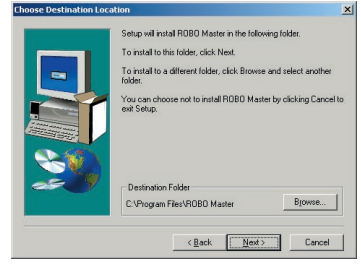
Click [Next] to proceed.

(2) The "Software License Agreement" screen will be displayed.


Software License Agreement
Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
Please read the following Software License Agreement carefully, paying particular attention to the rights and limitations stipulated therein. If you agree to these terms, this software will be installed in your computer.
Note: If there is any discrepancy between the printed Software License Agreement which accompanies this software and the terms below, the printed Software License Agreement takes precedence.
Software License Agreement
Regarding the software provided with this agreement("Software"), this License Agreement with Graphtec Corporation("Graphtec") grants you("User") the right to use the Software within on the basis of the following terms and such use presumes that you have also agreed to the following terms.
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install ROBO Master, you must accept this agreement.
< Back
Yes
No

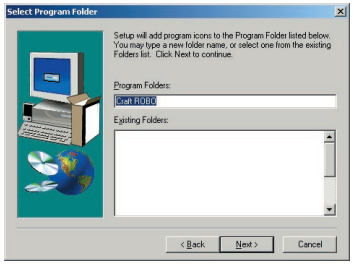
Carefully read the provisions of the agreement, and click [Yes] to continue the installation.

(3) The "Choose Destination Location" screen will be displayed.


Choose Destination Location
Setup will install ROBO Master in the following folder.
To install to this folder, click Next.
To install to a different folder, click Browse and select another folder.
You can choose not to install ROBO Master by clicking Cancel to exit Setup.
Destination Folder
C:\Program Files\ROBO Master
Browse...
< Back
Next >
Cancel

Select the folder in which ROBO Master is to be installed. If you want to change the folder, click the [Browse] button and select a folder.

(4) The "Select Program Folder" screen will be displayed.


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folders:
Craft ROBO
Existing Folders:
< Back
Next >
Cancel

Note: Program Folder is the name of a folder displayed in the Windows [Start] menu.

If you do not want to change the folder, click [Next] to proceed.

(5) When the system has finished copying files, a "Setup Complete" screen is displayed.

Click [Finish] to complete the installation.

(6) When the installation of this program has been completed, proceed to install the Craft ROBO controller and the Craft ROBO driver.

3 Basic Operations

This chapter describes the basic ROBO Master operations, from startup to cutting.

Note: The term "media" as used in the body text of this manual refers to paper, film, and other materials to be cut or printed on.

3.1 Starting Up and Exiting

Starting Up

When this software has been installed in your computer, "ROBO Master" is added to "All Programs" in the [Start] menu.

Click [Start] → [All Programs] → [Craft ROBO] → [ROBO Master] to start up the software.

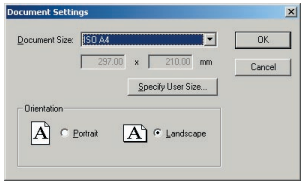
Exiting

To exit, click "Exit" in the [File] menu.

3.2 Preparations

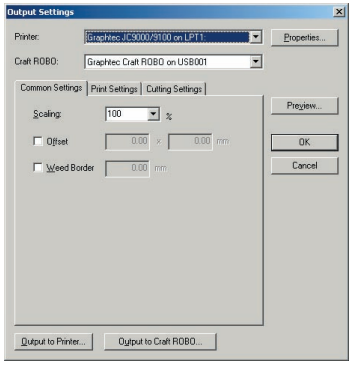
First, prepare a new file to create the data to be printed or cut.

(1) Creating a new file
Choose "New" from in the [File] menu to display the [Document Settings] window.



Set the "Document Size" according to the size of the document to be output. Next, choose the "Orientation" and then click the [OK] button.

(2) Setting the output destination
Choose "Output Settings" from the [File] menu to display the [Output Settings] window.



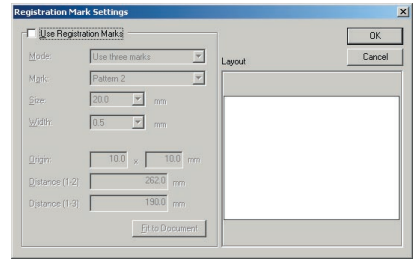
In this window, specify "Printer" and "Craft ROBO". For "Printer", select the printer driver to be used to print. "Craft ROBO" is displayed when the Craft ROBO driver is installed in your computer. There is normally no need to change this setting. If "Craft ROBO" is not displayed, install the Craft ROBO driver.

This completes the preparations.

3.3 Cutting Text Outlines

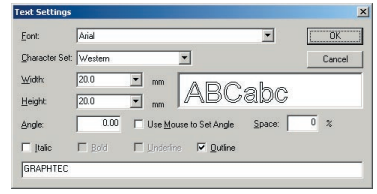
This section describes the procedure for drawing a character string and then cutting its outline (text border).

(1) Disabling the registration mark setting
Choose "Registration Mark Settings" from the [Edit] menu to display the [Registration Mark Settings] window.

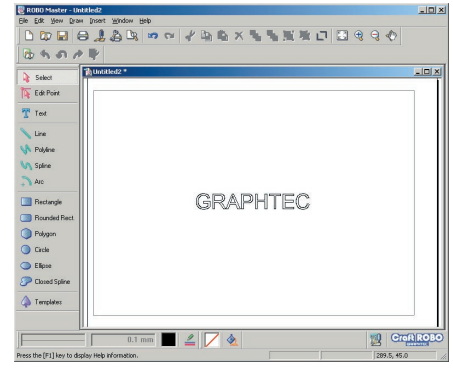


Deselect the "Use Registration Marks" checkbox, and then click the [OK] button.

(2) Entering a character string
Click the [Text] tool button, or choose "Text" from the [Draw] menu to display the [Text Settings] window.



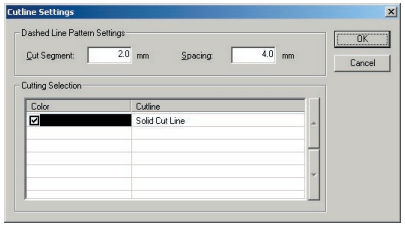
In this window, set the "Font", "Character Set", "Width", "Height", "Angle", and the like, and then enter the character string to be drawn. Select the "Outline" checkbox. Click the [OK] button. The character string will be displayed at the cursor position. Left-click at the position at which the character string is to be placed.
If the checkbox "Use Mouse to Set Angle" has been selected in the [Text Settings] window,



proceed to determining the angle of the character string. As the mouse is moved, the angle of the character string changes. Left-click at the angle to be entered. At this time, if you hold down the [Shift] key while moving the mouse, the string angle will be changed by 45 degrees at a time.

(3) Making the cut data settings

Choose "Output Settings" from the [File] menu to display the [Output Settings] window. Choose the [Cutting Settings] tab in this window, and click the [Cutline Settings] button.



The [Cutline Settings] window will be displayed. Confirm that the color for the outline of the character string is selected, and that "Solid Cut Line" is selected for "Cutline". Then, click the [OK] button.

Note: All of the colors used are automatically added to the "Cutting Conditions" list. Deselect the colors that are not used for the cut data.

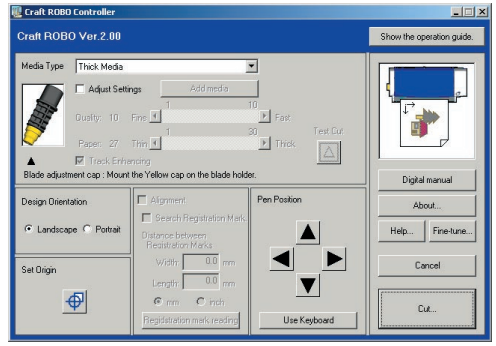
(4) Confirming the output image

Choose "Preview" from the [File] menu to display the [Preview] window. Choose "Cut Image Only" from the [View] menu, and confirm the image to be output to (to be cut by) the Craft ROBO. To exit Preview, choose "Close" from the [Output] menu.

(5) Outputting to the Craft ROBO

ⓐ Starting Up the Craft ROBO Controller

Choose " Craft ROBO" from the [File] menu and then click [OK] in the displayed window to display the Craft ROBO Controller. The Craft ROBO Controller is the window where the various settings for the Craft ROBO are made.



ⓑ Check Plotting

To avoid wasting media, we recommend performing check plotting before using the cut data to cut for the first time, or when the cut data has been altered. Check plotting enables the Craft ROBO to actually draw solid lines using a pen (ball-point pen) to determine whether the cut data created is output correctly.

ⓑ-1 Mount a pen (ball-point pen) in the Craft ROBO, and choose "Pen" from the "Media Type" section of the Craft ROBO Controller screen.

ⓑ-2 Load the media (a sheet of A4 or letter size copy paper can be used here) for check plotting.

ⓑ-3 Use the [Pen Position] buttons on the Craft ROBO Controller screen to move the pen (ball-point pen) to the position where check plotting will be performed, and then click the [Set Origin] button. (If the current position is satisfactory, simply proceed to the next step).

Press the [Cut] button in the Craft ROBO Controller screen to start drawing the cut data line(s).

Note: When you have confirmed that the cut data is drawn correctly, perform test cutting. If the cut data is not correctly drawn, check the cut data settings again.

ⓒ Test Cutting

Always perform test cutting when any media is to be cut for the first time or the media to be cut (paper or vinyl film) is changed. The media used in test cutting should be the same media that will actually be cut.

ⓒ-1 Choose the media to be cut from the "Media Type" section of the Craft ROBO Controller screen.

ⓒ-2 Attach the blade adjustment cap in the color displayed for the selected Media Type to the cutter plunger, and then mount the plunger in the Craft ROBO. If you are using the "Carrier Sheet", attach the "Standoff Ring" to the cutter plunger before mounting it in the Craft ROBO.

The media will actually be cut in a Test Cutting operation. Use the [Pen Position] buttons on the Craft ROBO Controller screen to move the cutter to a position that does not overlap the area where you want to cut your design. Do not click the [Set Origin] button at this time. (Refer to the check plot drawn as described in the preceding section to find an area for test cutting that does not overlap your design.)

Check the result of the test cutting. If the media is not cut correctly (excessively or insufficiently cut), adjust the length of the blade protruding from the cutter plunger (referring to the Craft ROBO user's manual) or use "Adjust Settings" on the Craft ROBO Controller screen to determine the conditions for obtaining the best cutting result.

ⓓ Setting the origin
Before data is cut by the Craft ROBO, the reference point for the plotting area (the origin) can be changed. In landscape orientation, the origin is at the left rear of the Craft ROBO when viewed from the front. In portrait orientation, it is at the right rear of the Craft ROBO as viewed from the front. That position is output so that it corresponds to the lower left corner of the ROBO Master document.

ⓓ-1 Use the [Pen Position] buttons on the Craft ROBO Controller screen to move the cutter to the position to be used as the origin.

ⓓ-2 When the position to be used as the origin is determined, click the [Set Origin] button on the Craft ROBO Controller screen. That position becomes the origin.

The "Orientation" setting selected determines the orientation of the design with respect to the origin position. Please refer to the arrows shown on the drawing of the Craft ROBO in the Craft ROBO Controller screen.

(6) Cutting
Upon completion of the Craft ROBO Controller operations, output the cut data to the Craft ROBO. After confirming the content, click [Cut...] at the lower right corner of the Craft ROBO Controller screen. The Craft ROBO will begin cutting the outline.

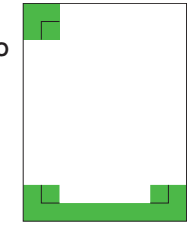
Note: For details on using the Craft ROBO and the Craft ROBO Controller, please refer to the Craft ROBO user's manual.

3.4 Cutting the Periphery of a Character String Drawn in an Ellipse

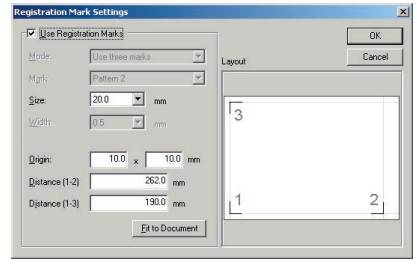
This section describes the procedure for printing an object consisting of a character string drawn in an ellipse, and then cutting the periphery of that object. To cut the contours of a printed object, the registration marks must be printed along with the object. Here, we'll create registration marks first, and then draw an ellipse.

Note:

- **Registration marks are the alignment marks used to ensure that the positions of the printed image and the cut line match, and they are printed around the image. The registration marks are shaped like the letter "L," and are placed at three locations enclosing the printed image.**
  Depending on the printer model, the printable area and the printing positions with respect to the media may vary slightly. The Craft ROBO reads the registration marks in order to confirm the position of the printed image and then performs cutting at the correct position.
- **When using registration marks, a fixed area around each registration mark is not printed. When registration marks are used, therefore, make sure the object to be printed, such as a picture or character string, does not enter the areas shown in green in the figure. However, cut data is output even for the green parts of the figure.**



(1) Registration Mark Settings
Next, we'll create new data. To create registration marks, choose "Registration Mark Settings" from the [Edit] menu to display the [Registration Mark Settings] window.



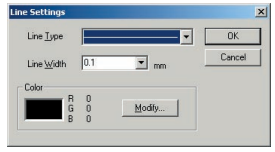
Select the "Use Registration Marks" checkbox, and set the origin and other parameters of the registration marks. (With ROBO Master Ver. 1.10 and later versions, the "Use Registration Marks" checkbox is selected from the start).

Note: For details on setting registration marks, please refer to Section 4.9, "Registration Mark Settings Window".

(2) Creating an ellipse

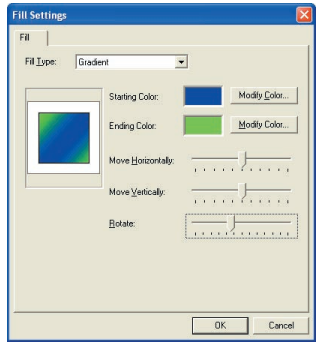
ⓐ Drawing an ellipse
Choose "Ellipse" from the [Draw] menu, and left-click at the center point of the ellipse. An ellipse will be displayed as the mouse is moved. Reshape the ellipse as desired, and click the mouse button again.

ⓑ Setting the line color of the ellipse
To change the line color of the ellipse, with the ellipse selected, choose "Line Settings" from the [Draw] menu to display the [Line Settings] window.



Click [Modify...] in the "Color" section, and select the desired line color.

ⓒ Fill settings
To fill the ellipse, with the ellipse selected, choose "Fill Settings" from the [Draw] menu to display the [Fill Settings] window. Choose "Solid" or "Gradient" for "Fill Type", and click the [Modify Color] button to select the color with which the ellipse is to be filled.



Note: For details on gradation, please refer to "Gradient" in Section 4.12, "Fill Settings Window".

(3) Entering a character string

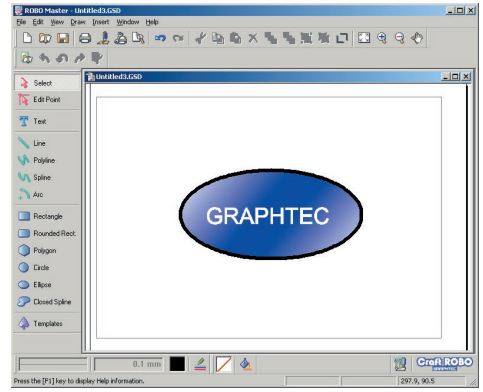
ⓐ Entering a character string
Choose "Text" from the [Draw] menu to display the [Text Settings] window. In this window, set the "Font", "Width", "Height", and the like, and then enter the character string to be drawn. Click the [OK] button. The character string will be displayed at the cursor position. Move the character string into the ellipse, determine the position at which the character string is to be placed, and then left-click.

ⓑ Setting the text color
To change text color, with the character string selected, choose "Line Settings" from the [Draw] menu to display the [Line Settings] window. Click [Modify...] in the "Color" section, and select the desired character string (line segment) color.

ⓒ Adjusting the character string
Choose "Select" from the [Draw] menu, and then click the desired character string to display a border enclosing the character string. In this status, the position, width, or height of the character string can be changed. After making the change(s), click any blank space of the screen to deselect it.

Note: For details on editing the position or size of an object, please refer to "Select" in Section 4.1.4, "Draw Menu", and to Section 4.14, "Position Window".

The screen should look like the one shown below.



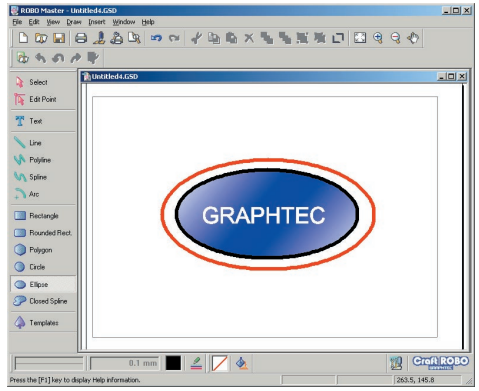
(4) Creating cut data

ⓐ Drawing cut data
Draw an ellipse to create the cut data with which to cut the periphery of the ellipse created above. Choose "Ellipse" from the [Draw] menu, and left-click at the center point of the ellipse. An ellipse will be displayed as the mouse is moved. Reshape the ellipse as desired, and left-click the mouse button again.

ⓑ Setting the color of the cut data
With the ellipse for the cut data selected, choose "Line Settings" from the Draw menu to display the [Line Settings] window. Click [Modify...] in the "Color" section, and select the desired color for the cut data (a color that is not used in the print data).

ⓒ Fill Settings
With the ellipse for the cut data selected, choose "Fill Settings" from the [Draw] menu to display the [Fill Settings] window. Choose "Transparent" for "Fill Type".

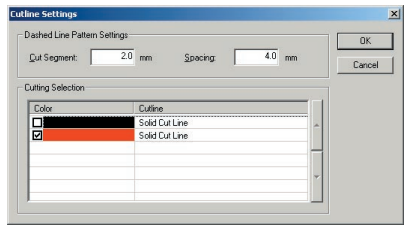
The screen should look like the one shown below. The red line drawn outside the blue ellipse is the line to be cut (cut data).



Note: In the screen shot, the cut line is drawn in a slightly enlarged size for easy identification. The cut line can be drawn much closer to the outside contour of the blue ellipse than shown here. Moreover, if the border of the ellipse (the black line in this example) is unnecessary, the border can be specified for the cut data.

ⓓ Making the cut data settings

Choose "Output Settings" from the [File] menu to display the [Output Settings] window. Choose the [Cutline Settings] tab in this window, and click the [Cutline Settings] button. The [Cutline Settings] window will be displayed. Confirm that the color specified for the cut data in (4)–ⓑ above is selected, and that "Solid Cut Line" is selected for "Cutline". Then, deselect all other colors.



In addition, choose the [Print Settings] tab in the [Output Settings] window, deselect the "Print Cut Lines" checkbox, and click [OK]. If the "Print Cut Lines" checkbox is selected, the cut line will also be printed when printing is performed.

Note: For details on Output Settings, please refer to "Section 4.7, "Output Settings Window".

(5) Output

ⓐ Confirming the output image

Click [Preview...] in the [Output Settings] window. Switch between "Print Image Only" and "Cut Image Only" in the [View] menu, and confirm the image to be printed and the image to be cut.

ⓑ Output to the printer

Choose "Print" from the [Output] menu to display the [Print] window. After confirming the content, click the [OK] button to print.

Note: For details on operating the printer, please refer to the instruction manual for your printer.

ⓒ Output to the Craft ROBO

Perform the same operations performed in Step (5), "Outputting to the Craft ROBO", of Section 3.3, "Cutting Text Outlines", from "ⓐ Starting up the Craft ROBO Controller" to "ⓑ Check plotting" and "ⓒ Test cutting". As registration marks are used here, follow the procedures described below.

ⓓ Position alignment (Read registration marks) and cutting

After checking the printed results, load the media to be cut in the Craft ROBO. Check that the side printed with "PRINT SIDE" between the registration marks is facing upwards, feed the media into the Craft ROBO up to the specified position, and then press the standby switch. Click the [Cut...] button at the lower right corner of the Craft ROBO Controller screen. The Craft ROBO will begin cutting the outline.

Note: For details on using the Craft ROBO and the Craft ROBO Controller, please refer to the Craft ROBO user's manual.

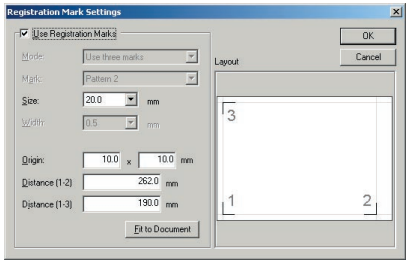
3.5 Cutting the Periphery of a Printed Image

This section describes the procedure for loading and printing an image file, and cutting the periphery of the image.

Note: The term "image file" refers to a data file consisting of pictures or photos (BMP, TIF, JPEG and the like). Here, we'll create registration marks first, and then load an image file.

(1) Registration Mark Setting

To create registration marks after creating a new file, choose "Registration Mark Settings" from the [Edit] menu to display the [Registration Mark Settings] window. Select the "Use Registration Marks" checkbox, and then set the origin and other parameters of the registration marks.



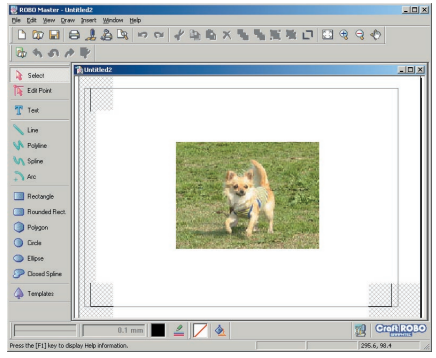
(With ROBO Master Ver. 1.10 and later versions, the "Use Registration Marks" checkbox is selected from the start).

Note: For details on setting registration marks, please refer to Section 4.9, "Registration Mark Settings Window".

(2) Loading and adjusting an image

ⓐ Loading an image file

Choose "File" from the [Insert] menu to display the [Load File] window. In this window, specify the file to be loaded. An image border will be displayed on the screen. Determine the location at which the image is to be placed, and then left-click.



ⓑ Adjusting the image

If the image data has small squares attached to its four corners, the image data is in the selected status. If it is not selected, choose "Select" from the [Draw] menu and click on the image data. When it is in this status, the image data can be moved or enlarged/reduced.

Note: For details on editing the position or size of an object, please refer to "Select" in Section 4.1.4, "Draw Menu", and to Section 4.14, "Position Window".

(3) Creating cut data

ⓐ Drawing cut data

Create cut data with which to cut the periphery of the loaded image. Choose "Rounded Rect." from the [Draw] menu, and then left-click at the top left of the image, at a slight distance away from the image. When the mouse is moved, a rounded rectangle is displayed. Move the mouse to the lower right of the image to a point where the image is enclosed by the rectangle, and then left-click once again to complete the rectangle.

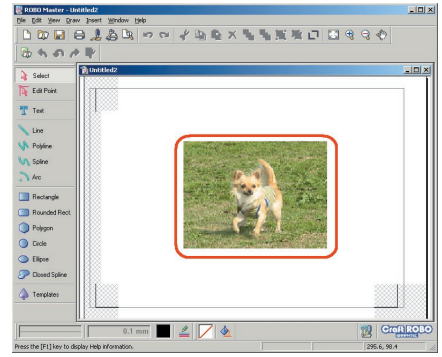
Note: [Polygon], [Circle], or other tools can also be used, in addition to [Rounded Rect.,] to draw cut data.

ⓑ Setting the color of the cut data

With the rounded rectangle for the cut data selected, choose "Line Settings" from the [Draw] menu to display the [Line Settings] window. Click [Modify...] in the "Color" section, and select the desired color for the cut data.

ⓒ Fill Settings

With the rounded rectangle for the cut data selected, choose "Fill Settings" from the [Draw] menu to display the [Fill Settings] window. Choose "Transparent" for "Fill Type". The screen should look like the one shown below.



The red line drawn around the image is the cut data. In the screen shot shown here, the cut data is created in a slightly enlarged size for easy identification. The cut data can actually be created much closer to the image border than shown here.

Note: To cut out a pasted image, with the image selected, click [Clip Image] in the [Edit] menu and then select a closed form tool such as a rectangle. For details, refer to "Clip Image" in Section 4.1.2, "Edit Menu".

ⓓ Making cut data settings
Choose "Output Settings" from the [File] menu to display the [Output Settings] window. Choose the [Cutting Settings] tab in this window, and click the [Cutline Settings] button. The [Cutline Settings] window will be displayed. Confirm that the color selected for the cut data in (3)–ⓑ above is selected, and that "Solid Cut Line" is selected for "Cutline". In addition, select the [Print Settings] tab of the [Output Settings] window, and deselect the "Print Cut Lines" checkbox. If the "Print Cut Lines" checkbox is selected, the cut line will also be printed when printing is performed.

(4) Output

ⓐ Confirming the output image
Click [Preview...] in the [Output Settings] window. Switch between "Print Image Only" and "Cut Image Only" in the [View] menu, and confirm the image to be printed and the image to be cut.

ⓑ Output to the printer
Choose "Print" from the [Output] menu to display the [Output to Printer] window. After confirming the content, click the [OK] button to print.

Note: For details on operating the printer, refer to the instruction manual for your printer.

ⓒ Output to the Craft ROBO
Perform the same operations described in step (5)–ⓒ, "Output to the Craft ROBO", in Section 3.4, "Cutting the Periphery of a Character String Drawn in an Ellipse".

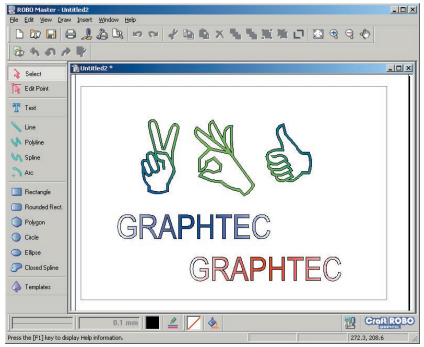
3.6 For Easy Operation

Shortcuts are available for the following operations.

- Dragging with the right mouse button held down to specify an area displays the specified area.
- Areas can also be displayed in the preview screen in the same way by dragging with the right mouse button held down.
- Pressing the [F2] key displays the entire medium.
- Pressing the [F3] key during an enlarged display enables the Move mode. The cursor changes to the shape of a hand, allowing you to scroll the screen in any direction. Hold down the left mouse button, and drag the mouse in the direction in which the screen is to be moved. Press the [F3] key again to exit Move mode.

4 Function Details

4.1 Main Window



4.1.1 File Menu

New ..... Creates new data.
When "New" is chosen, the [Document Settings] window is displayed. Set the parameters of the media according to the size and orientation of the data to be created, and then click the [OK] button.

Note: For details on the [Document Settings] window, please refer to Section 4.2, "Document Settings Window".

Open..... Opens saved data.
When Open is chosen, the [Open] window is displayed. After selecting the file to be opened, click the [OK] button to open the selected file.

Load DXF ..... Loads DXF files in AutoCAD R13 format.
The DXF objects that can be loaded are limited to line segments, polylines, splines, circles, arcs, and ellipses.

Note: The term "DXF file" refers to an AutoCAD file format.

Thumbnail Brawser
..... Calls up the [Thumbnails] window.
A folder list and a preview screen are shown on the left side of the [Thumbnails] window, and the saved data and DXF data in a specified folder are shown on the right side of the window. Double-clicking the displayed image allows the file of that image to be loaded. To close the [Thumbnails] window, click the [x] button at the upper right corner of the window.

Note: The term "Thumbnail" refers to a list of one or more rows of images shown in reduced size.

Close ..... Closes the data that is currently being worked on.

Save ..... Saves the currently open data over the existing file.

Save As ..... When "Save As" is selected, the [Save As] window is displayed. Specify the location for saving, specify a file name, and click the [OK] button to save.

Document Settings
..... Displays the [Document Settings] window.

Note: For details on the [Document Settings] window, please refer to Section 4.2, "Document Settings Window".

Preferences ..... Displays the [Preferences] window.

Note: For details on the [Preferences] window, please refer to Section 4.3, "Preferences Window".

Preview..... Displays an output image of the data to be printed or to be cut currently being worked on.

Note: For details on Preview, please refer to Section 4.4, "Preview Display."

Print ..... Displays the [Output to Printer] window.

Note: For details on the [Print] window, please refer to Section 4.5, "Output to Printer Window".

Craft ROBO ..... Displays the [Output to Craft ROBO] window.

Note: For details on the [Output to Craft ROBO] window, please refer to Section 4.6, "Output to Craft ROBO Window".

Output Settings.. Displays the [Output Settings] window in which general settings for output to the printer or Craft ROBO will be made.

Note: For details on the [Output Settings] window, please refer to Section 4.7, "Output Settings Window".

Exit..... Closes the ROBO Master program.

4.1.2 Edit Menu

Undo ..... Cancels the immediately preceding editing operation.

Redo ..... Re-executes the most recent operation that has been canceled by "Undo."

Cut ..... With a form, text, or image selected, click [Cut...] to cut the selected object from the screen.

Copy ..... With a form, text, or image selected, click [Copy] to ready the selected object for copying.

Paste ..... Pastes the cut or copied object.
When [Paste] is clicked after an object is cut, the object is restored at its original position. When [Paste] is clicked after an object is copied, the border color of the copied object changes to yellow. Select that object by left-clicking on it and dragging it. A copy of the same object will appear. Move it to the desired position and then left-click.

Delete ..... Deletes a selected object.

Bring to Front... Moves a selected object to the front of all objects on the screen. If filled objects overlap each other, select one to be placed at the front and click [Bring to Front].

Send to Back ... Moves a selected object to the rear of all objects on the screen. If filled objects overlap each other, select one to be placed at the rear and click [Send to Back].

Group..... Grouping allows multiple objects to be handled as one object. To group objects, hold down the [Shift] key while clicking on the objects to be selected. In this way, multiple objects can be selected at the same time. While in this status, click [Group]. A rectangle enclosing the multiple objects selected will appear. The objects enclosed in that rectangle can be edited by moving or deleting them as one object. When a picture comprised of multiple objects is created, group those objects so that they can then be easily moved together.

Ungroup..... Ungroups grouped objects. To ungroup a grouped object, select a group to be ungrouped and click [Ungroup].

Rotate Image ... Rotates an image 90 degrees each time it is clicked.
Images can be rotated using three rotate commands: "Rotate 90° CCW", "Rotate 180°", and "Rotate 90° CW".

Clip Image ..... Clips an image.

(1) Use "File" on the Insert menu to load image data.

(2) While the image data is selected, select the "Clip Image".

(3) The Clipping mode is entered. Select a closed form such as Square, Polygon, Closed Spline, or Ellipse to draw a form on the image to be cut out.

(4) Upon completion of drawing, click outside the image. The image that is cut out in the form of the drawn shape will be displayed.

Note: When drawing a form to be cut out, if the entire form extends past the image, the entire image will be cut out.

Registration Mark Settings
..... Displays the [Registration Mark Settings] window.

Note: For details on the [Registration Mark Settings] window, please refer to Section 4.9, "Registration Mark Settings Window".
Registration marks cannot be used at the same time as the Weed Border function.

Grid Settings.... The term "grid" refers to grid boxes or dots displayed on the screen, which serve as a guide for drawing.

Note: For details on the [Grid Settings] window, please refer to Section 4.10, "Grid Settings Window".

4.1.3 View Menu

Fit..... Changes the display range of the data currently being worked on, along with the display scale, so that the entire media can be viewed.

Zoom In ..... Enlarges the display of the data currently being worked on.

Zoom Out..... Reduces the display of the data currently being worked on.

Move..... Clicking "Move" selects move mode, and clicking it again deselects it. In Move mode, the cursor changes to the shape of a hand, allowing the screen to be scrolled by dragging using the mouse, and allowing the entire region of the media to be viewed.

Note: "Move" can be used only when the media is displayed in enlarged view. When the entire media is being displayed, the displayed range cannot be moved.

Tool Bar ..... Allows each tool button and bar in the main window to be shown or hidden. When the mouse cursor is placed over the "Tool Bar," five menu commands are listed: "Standard Tools", "Edit Tools", "Draw Tools", "Line Tools", and "Fill Tools". Click on any tool to display it. The displayed tool is flagged by a check mark.

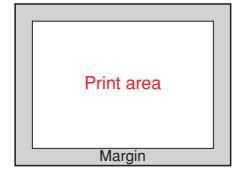
Note: Each of the tool buttons and bars is assigned the functions selected from the menu, allowing any of these commands to be invoked by clicking on the button or bar. The assigned function of a button or bar is displayed in Tip help (simple explanation) when the mouse cursor is placed over the button or bar for a few seconds.

Status Bar..... Allows the status bar to be shown or hidden.
The status bar is located at the bottom of the main window, and displays the status and a simple explanation of each function.

Registration Marks
..... Usable only when the "Use Registration Marks" checkbox in the Registration Mark Settings is selected. Specify whether to display registration marks on the screen.

Note: For details on registration marks, please refer to Section 4.9, "Registration Mark Settings Window".

Print Area..... The "print area" is a printable range specified according to the media size on the [Print Settings] tab of the [Output Settings] window, not including the margins specific to the printer. When the "Print Area" check box is selected, the range that can be cut is displayed. The inner part enclosed with lines is the range that can be cut.



View Grid ..... Displays a grid. The term "grid" refers to grid boxes or dots displayed on the screen, which serve as a guide for drawing.

Snap to Grid .... When "Snap to Grid" is selected, placement of a form is facilitated, since the form is placed along the grid boxes or dots displayed on the screen when "View Grid" is selected. Of the rectangular vertexes displayed around the selected form, the red vertex is the reference point when the form is moved.

Note: For details on the grid, please refer to Section 4.10, "Grid Settings Window".

4.1.4 Draw Menu

Select ..... This is the tool for selecting a previously drawn form.
When a form is selected, small squares or triangles are displayed around it. In this state, the operations described below can be performed.

- Changing the position
  When the mouse cursor is placed over the form, the cursor will change to the shape of a hand. The position of the form can be changed by dragging it in this status.
- Editing the form
  When the mouse is placed over a small black square or triangle, the cursor changes in shape to a bidirectional arrow. The width or height of the form can be changed by dragging it in this status. Holding down the [Shift] key while dragging the black square enables; the size of the form can be changed without changing its width-to-height ratio.
- Rotating the form
  When the form is clicked again, small black circles are displayed at the four corners of the form. When the mouse cursor is placed over a small black circle, the cursor will change shape from a bidirectional arrow ring. The form can be rotated by dragging it in this status.

Note: Images cannot be rotated in this way. For details on rotating images, please refer to "Rotate Image" in Section 4.1.2, "Edit Menu". Nor can images be rotated when a line segment or image and a form are grouped together, or when an image and a form are selected simultaneously.

Edit Point .. This is the tool for moving one of the vertexes of a form to change its shape. The effect of the [Edit Point] tool varies with each form.

- Polyline, polygon, spline, and closed spline
  Moving Anchor Point:
  When one of these forms is clicked, a small black square is displayed at each vertex, so dragging a square after left-clicking on it to select it allows the vertex to be moved as desired.
  Add Anchor Point:
  When one of these forms is clicked on one of its lines, a point can be added. Moving added points reshapes a form into a more complex form. In addition, right-clicking on a point allows the point to be deleted.

Note: For splines and closed splines, a point cannot be moved to the same coordinate as that of the point immediately preceding or following it.

- Arc When an arc is clicked, small black squares are displayed at both ends of it, allowing the start or end point of the arc to be changed. (The center and radius of the arc are fixed during the procedure.)

Note: When another form (line segment, text, rectangle, circle, ellipse, image, or grouped form) is clicked, an object selection tool is invoked.

Text ..... Selects the tool for creating a character string.
Follow the procedure specified below to create a character string.

(1) Select the [Text] tool to display the [Text Settings] window.
(2) In the [Text Settings] window, make the necessary settings and then click the [OK] button.
(3) The set character string will be displayed at the side of the cursor. Move it to the desired location and click to specify the position.

Note: For details on the [Text Settings] window, please refer to Section 4.13, "Text Settings Window".

Line ..... Selects the tool for creating a line segment.
Follow the procedure specified below to create a line segment.

(1) Select the [Line] tool. The cursor will change to the shape of a cross.
(2) Click on the start point to specify it.
(3) Click on the end point to specify it.

Note: If you hold down the [Shift] key while clicking on a point, the position that can be specified as the end point will be limited to an angle in 45-degree units from the start point.

Polyline ..... Selects the tool for creating a polyline.
Follow the procedure specified below to create a polyline.

(1) Select the [Polyline] tool. The cursor will change to the shape of a cross.
(2) Click on the start point to specify it.
(3) Sequentially click on passage points to specify them.
(4) Double-click at the position that is to be the end point.

Note: If you hold down the [Shift] key while clicking on a point, the position that can be specified as a passage point or the end point will be limited to a direction in 45-degree units from the immediately preceding point.

Spline ..... Selects the tool for creating a spline.
Follow the procedure specified below to create a spline.

(1) Select the [Spline] tool. The cursor will change to the shape of a cross.
(2) Click on the start point to specify it.

(3) Sequentially click on passage points to specify them. (Adjacent points are linked with a spline.)

(4) Double-click at the position that is to be the end point. (Before specifying the end point, at least two points including the start point must be specified.)

Note: Passage points and the end point cannot be entered at the same coordinate as that of the immediately preceding point.

Arc..... Selects the tool for creating an arc.
Follow the procedure specified below to create an arc.

(1) Select the [Arc] tool. The cursor will change to the shape of a cross.

(2) Click to specify the position of the center point of a circle including the arc to be created.

(3) As the mouse is moved, a circle is displayed around the center point specified above. The distance by which the mouse cursor is moved from the center is the radius of the circle. When the circle is of the desired size, click to confirm. The point at which you've clicked is the start point of the arc.

(4) Move the mouse to draw an arc, and click at the end position to specify it.

Note: If you hold down the [Shift] key while specifying the end position of the arc, the arc can be moved in increments of 45 degrees.

Rectangle.. Selects the tool for creating a rectangle.
Follow the procedure specified below to create a rectangle.

(1) Select the [Rectangle] tool. The cursor will change to the shape of a cross.

(2) Click at one of the corners of the rectangle to be created to specify it.

(3) Click at the opposite corner of the rectangle to specify it.

Note: If you hold down the [Shift] key while clicking, a square can be created.

Rounded Rect.
..... Selects the tool for creating a rounded rectangle.
Follow the procedure specified below to create a rounded rectangle.

(1) Select the [Rounded Rect.] tool. The cursor will change to the shape of a cross.

(2) Click at one of the corners of the rounded rectangle to be created to specify it.

(3) Click at the opposite corner of the rounded rectangle to specify it.

Note: Immediately after a rounded rectangle is created, a green circle is displayed in it. Dragging that circle allows the roundness of the rectangle to be adjusted.

If you hold down the [Shift] key while clicking, a square with rounded corners can be created.

Polygon..... Selects the tool for creating a polygon.
Follow the procedure specified below to create a polygon.

(1) Select the [Polygon] tool. The cursor will change to the shape of a cross.

(2) Click at one of the corners of the polygon to be created to specify it.

(3) Sequentially click at the successive corners of the polygon to specify them.

(4) Double-click at the last corner of the polygon.

Note: When small squares are displayed at each point of the polygon immediately after its creation, the squares can be moved in order to finely adjust the shape of the polygon. In addition, the [Edit Anchor Point] button can be used to finely adjust the polygon later.

If you hold down the [Shift] key while specifying points, the specifiable position will be limited to a direction in 45-degree units from the immediately preceding corner.

Circle..... Selects the tool for creating a circle.
Follow the procedure specified below to create a circle.

(1) Select the [Circle] tool. The cursor will change to the shape of a cross.

(2) Click to specify the center point of the circle to be created.

(3) As the mouse is moved, a circle is displayed centering round the point specified above. The distance by which the mouse is moved from the center point determines the radius of the circle. When the circle is of the desired size, click to confirm.

Ellipse ..... Selects the tool for creating an ellipse.
Follow the procedure specified below to create an ellipse.

(1) Select the [Ellipse] tool. The cursor will change to the shape of a cross.

(2) Click to specify the center point of the ellipse to be created.

(3) As the mouse is moved, an ellipse is displayed centering round the point specified above. When the mouse is moved in the vertical direction, the ellipse is enlarged in the vertical direction; when you move the mouse in the horizontal direction, the ellipse is enlarged in the horizontal direction.

Note: If you hold down the [Shift] key while clicking, the ellipse will become a circle.

Closed Spline
..... Selects the tool for creating a closed spline.
Follow the procedure specified below to create a closed spline.

(1) Select the [Closed Spline] tool. The cursor will change to the shape of a cross.

(2) Click at any point to create a closed spline.

(3) Click at another point to specify it. When the mouse is moved, the displayed spline becomes looped.

(4) Specify successive passage points to draw a closed spline as desired.
(5) Double-click at the last point of the closed spline.

Note: Passage points and the end point cannot be entered at the same coordinate as that of the immediately preceding point.

Templates
..... Templates such as hearts that are often used are stored here. These shapes can be freely called up and used in any design, and the called up shapes can be edited in the same way as drawn shapes. Follow the procedure specified below to call up the shapes.
(1) Select the [Templates] tool to display the shapes stored in ROBO Master.
(2) Select the shape you want to use, and then left-click it.
(3) The selection window closes, and a frame representing the size of the shape is displayed next to the mouse cursor.
(4) Move the cursor to the position at which the shape is to be placed, and then click to confirm.

Line Settings
..... Displays the [Line Settings] window to set line types, line widths, and line colors.
- If this window is called up while a form is selected, use it to change the settings of the selected form.
- If this window is called up while no forms are selected, the settings made here are reflected in the form to be created hereafter.

Note: For details on the [Line Settings] window, please refer to Section 4.11, "Line Settings Window".

Fill Settings
..... Displays the [Fill Settings] window for setting the filling of closed forms.
- If this window is called up while a form is selected, use it to change the settings of the selected form.
- If this window is called up while no forms are selected, settings made here are reflected in the form to be created hereafter.

Note: For details on the [Fill Settings] window, please refer to Section 4.12, "Fill Settings Window".

Text Settings .... Displays the [Text Settings] window for setting text fonts and sizes.
- If this window is called up while a character string is selected, use it to change the settings of the selected character string.
- If this window is called up while no character strings are selected, settings made here are reflected in the character string to be created hereafter.

Note: For details on the [Text Settings] window, please refer to Section 4.13, "Text Settings Window".

Position Settings
..... Displays the [Position] window to set the positions, sizes, and angles of rotation of forms. Selecting a form enables this window to be called up.

Note: For details on the [Position] window, please refer to Section 4.14, "Position Window".

4.1.5 Insert Menu

Select Source
..... Selects one of the TWAIN drivers for scanners that are incorporated into Windows.

Acquire ..... Starts up a selected TWAIN driver and captures a raster image from the scanner. After images are captured, a rectangle representing the image size is displayed next to the cursor. Move the cursor to the position at which the image is to be placed, and then click to confirm.

File..... Loads an image file or a metafile (WMF file).
When "Image File" is selected, the [Load File] window is displayed. Select the desired image file or metafile in the [Load File] window, and then click the [OK] button to place the file. A rectangle representing the image size will be displayed next to the cursor. Move the cursor to the position at which the image is to be placed, and then click to confirm.

Metafile Settings
..... Displays the [Metafile Loading Settings] window. In this window, the colors of the cutlines that are displayed when a Windows metafile that contains cut data was loaded can be changed.

Note: For details on the [Metafile Loading Settings] window, please refer to Section 4.15, "Metafile Loading Settings Window".

4.1.6 Window Menu

Cascade ..... Of the open documents, this command rearranges non-minimized windows on top of each other.

Tile Vertical ..... Of the open documents, this command rearranges non-minimized windows by aligning them vertically on the screen.

Tile Horizontal.. Of the open documents, this command rearranges non-minimized windows by aligning them horizontally on the screen.

Arrange Icons .. Of the open documents, this command rearranges minimized windows by aligning them with the lower left corner of the screen.

4.1.7 Help Menu

The hint to using
..... Opens a Tips window for ROBO Master.

User's Manual.. Opens the user's manual for ROBO Master.

Graphtec Web site
..... In an environment connectable to the Internet, this command starts up the browser to display the Graphtec web site.

About ..... Displays the version information on the ROBO Master software.

4.1.8 Craft ROBO Controller Icon

..... Clicking the [Craft ROBO Controller] icon at the lower right corner of the screen starts up the Craft ROBO Controller.

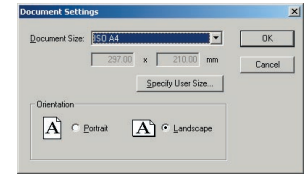
Note: If the Craft ROBO Controller was invoked using this icon, direct output from ROBO Master is not possible. To output, click the [OK] button in the [Output to Craft ROBO] window to invoke the Craft ROBO Controller. When the Craft ROBO Controller is invoked using the icon, it can only be used to perform check plotting, test cutting, or fine-tuning.

4.1.9 Craft ROBO Logo

.. Clicking the [Craft ROBO] icon at the lower right corner of the screen displays the Craft ROBO Website.

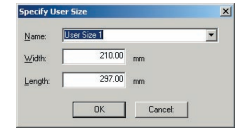
4.2 Document Settings Window

Displayed by selecting "Document Settings" from the [File] menu, this window enables setting of the size of the data to be created.



Document Size.. Sets the document size according to the size of the created data

- Editing the document size
  To edit the document size as desired, select "Specify User Size..." To use other than the designated document size, set the desired width and length here, and select it in "Document Size".



The [Specify User Size] window has the following items.

Name: Select the name of the document whose width and length are to be edited. Although the document name can be edited, a document name that already exists cannot be used.

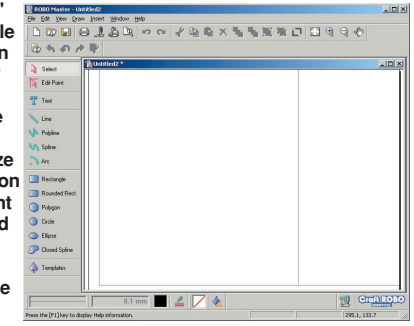
Note: Commas (,) cannot be used in a document name.

Width: Specify the document width in 0.01-mm units.

Length: Specify the document length in 0.01-mm units.

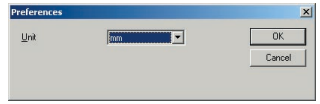
Orientation ..... Specify "Portrait" or "Landscape" as the media orientation.

Note: If the document size specified in the [Document Settings] window is larger than the media size set on the [Print Settings] tab of the [Output Settings] window, selecting the "View Print Area" checkbox displays the printable areas on the media selected on the [Print Settings] tab side by side so as to cover the entire document size specified in the [Document Settings] window. For example, if a document size of A4 and Landscape orientation were selected in the [Document Settings] window and Postcard and Landscape orientation selected in the [Print Settings] tab, the screen will look like the one shown.



4.3 Preferences Window

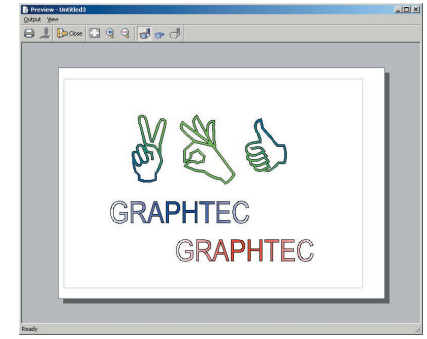
This window is displayed when "Preferences" is chosen from the [File] menu.



Unit ..... Sets the unit used for dimensions.
Here, select "mm" or "inch". The unit specified here applies to all items of the ROBO Master software in which lengths are specified.

4.4 Preview Display

When "Preview" is selected from the [File] menu, the main window changes to the preview display mode.



4.4.1 Output Menu

Print ..... Outputs the data currently displayed in preview to a printer.

Craft ROBO ..... Outputs the data currently displayed in preview to the Craft ROBO.

Exit..... Closes the preview display mode.

4.4.2 View Menu

Fit..... Changes the preview display range and scale so that the entire media can be viewed.

Zoom In ..... Enlarges the preview display.

Zoom Out..... Reduces the preview display.

Print & Cut ..... Changes the target to be displayed in preview. The image to be printed and the image to be cut are displayed on top of each other.

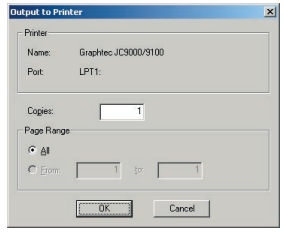
Print Image Only.. Changes the target to be displayed in preview. Only the image to be printed is displayed. If the "Print Cut Lines" checkbox on the [Print Settings] tab of the [Output Settings] window is selected, the image is displayed in preview along with the cut line. Therefore, the display is the same as that for Print & Cut.

Cut Image Only.. Changes the target to be displayed in preview. Only the output image for the Craft ROBO is displayed. The line that has had its color selected (flagged by a check mark) in "Cut Specifications" is displayed as the cut line.

Note: "Cut Image Only" cannot be selected if no colors are selected as cut lines in [Cut Specifications].

4.5 Output to Printer Window

This window is displayed when "Print" is selected from the [File] menu.



Printer ..... Displays the driver name and the output destination port of the currently selected printer.

Copies ..... Specifies the number of copies. It can be specified in the range of 1 to 999.

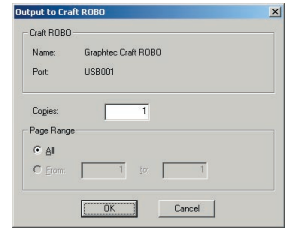
Page Range..... Specifies the pages to be printed. Select from two choices: "All" (all pages) or "From" (start page) and "to" (end page).

Note: "From" and "to" can only be selected when the data to be printed consists of multiple pages (two or more pages).

OK ..... The data currently being worked on is output to the printer.

4.6 Output to Craft ROBO Window

This window is displayed when "Craft ROBO" is selected from the [File] menu.



Craft ROBO ..... Name: Displays the Craft ROBO driver "Graphtec Craft ROBO".
Port: Displays the destination port to which to output.

Copies ..... Specifies the number of copies.
It can be specified in the range of 1 to 999.

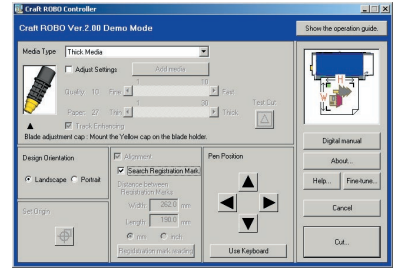
Note: If, after multiple copies are specified, the [OK] button is clicked to invoke the "Craft ROBO Controller" and the [Cut...] button clicked to start output, if the [Abort] button is clicked during output, the Craft ROBO Controller stops outputting all the other pages and the ROBO Master main window is displayed.

Page Range..... Specifies the pages to be cut. Select from two choices; "All" or "From" and "to."

Note: "From" and "to" can only be selected when the data to be cut consists of multiple pages (two or more pages).

If, after multiple copies are specified, the [OK] button is clicked to invoke the "Craft ROBO Controller" and the [Cut...] button clicked to start output, if the [Abort] button is clicked during output, the Craft ROBO Controller stops outputting only the page that was being output when the [Abort] button was clicked, and starts outputting from the next page.

OK ..... Clicking [OK] invokes the Craft ROBO Controller. When [Cut...] is clicked after the necessary operation is performed using the Craft ROBO Controller, it starts outputting to the Craft ROBO. To stop output, click [Cancel].

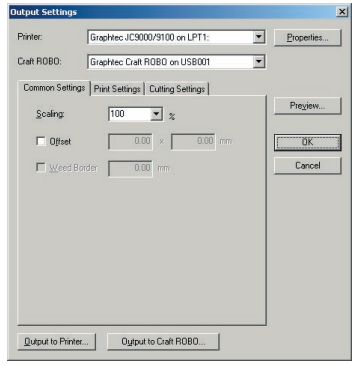


4.7 Output Settings Window

This window is displayed when "Output Settings" is selected from the [File] menu.

4.7.1 Always Displayed Items

The following explains the items that are always displayed around the [Common Settings], [Print Settings], and [Cutting Settings] tabs of this window.



Printer ..... Displays all of the printer driver names and their ports registered to Windows. Specify the driver to be used for output to a printer.

Note: For details on the printer driver, please refer to the user's manual for your printer.

Properties... .... Displays a setup window for the printer driver selected for "Printer."

Craft ROBO ..... Shows the "Graphtec Craft ROBO" driver name of the cutting plotter Craft ROBO and its output destination port.

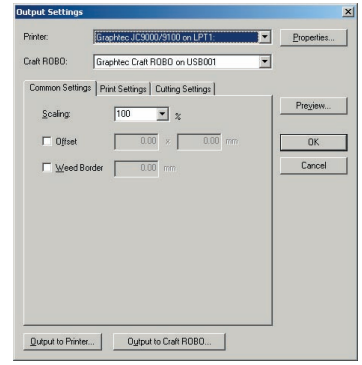
Preview... ..... Confirms the content of the output settings that have been set and displays its preview.

Output to Printer...
..... Confirms the content of the output settings that have been set and displays the [Output to Printer] window.

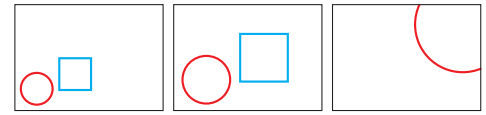
Output to Craft ROBO...
..... Confirms the content of the output settings that have been set and displays the [Output to Craft ROBO] window.

4.7.2 Common Settings

The content of settings made using the [Common Settings] tab are common to the printer and the Craft ROBO.



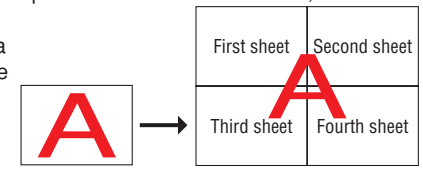
Scaling ..... Enlarges or reduces the size of the form to be output.
It can be specified in the range of 25% to 400%. The value specified applies equally to height and width.



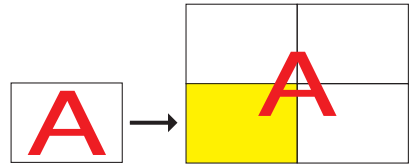
If 25% is specified, the form will be 1/16 in terms of area ratio. For forms and texts to be cut, images loaded are enlarged or reduced while maintaining their physical proportions. The media size will not be changed.

Offset ..... The output position is shifted by a specified length. A value for offset in the X (width) direction can be entered in the left-hand input box, and a value for offset in the Y (height) direction can be entered in the right-hand input box. The specifiable offset varies according to the media settings and so forth.

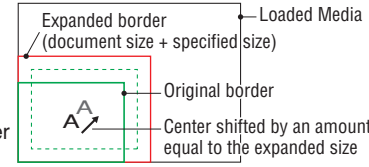
- When outputting to a printer
If some data is shifted off the print area as a result of offset, the data may be output separately in multiple sheets of media so that all data will fit in the print area. In such a case, four sheets of media are output.



• When outputting to the Craft ROBO
Only the data included in the cut area is cut. In this case, only the yellow part shown at the right is cut.

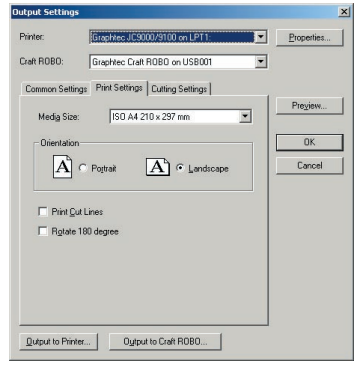


Weed Border ... Cuts an outside border corresponding to the dimensions of the document. When a die-cutting sticker is created using media larger than the document to be cut, use this function to peel off only the area required for the sticker on the media. The size of the border is the same as that of the document in the [Document Settings] window. The border can be expanded in the horizontal and vertical directions by a specified size. Specify the size in the range of 0.00 to 50.00. If the size of the border is expanded, the cut data is shifted from the cutting range by an amount equal to the expanded size, as shown below.
If a smaller border is required, create cut data for the outer border. If the "Weed Border" checkbox is selected, the border is cut when the object is cut.



Note: This function cannot be used at the same time as the Registration Mark function.

4.7.3 Print Settings



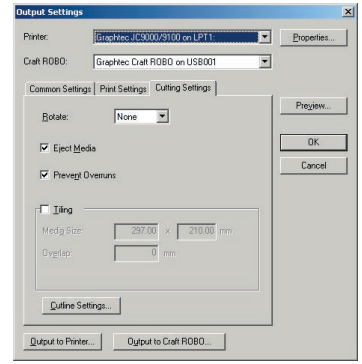
Media Size..... Specify the size of the media to be used for printing.

Orientation..... Specify the direction of the paper (printing direction).

Print Cut Lines
..... If this checkbox is selected, the lines that would be cut in "Output to Craft ROBO" are also printed.

Rotate 180 degrees
..... If this checkbox is selected, the object is rotated 180 degrees and then printed. This function is useful when the area for printing registration marks is too small, and even more so when the printer used has a wide trailing margin.

4.7.4 Cutting Settings



Rotate..... Rotates the data for output.
Select from "None," "90CCW," "180," or "90CW."

Note: This function cannot be used when registration marks have been set.

Eject Media..... Ejects the media to the front when the system has finished cutting.

Prevent Overruns
..... Prevents the media from being displaced in the Craft ROBO.

Tiling..... Use this function for handling large amounts of data that exceed the size of a single sheet of the media and you want to output it on multiple pages. Page boundaries are always cut.

Note: This function cannot be used when registration marks have been set.

- Media Size
Enter the size of the media used. In the left-hand text box, enter a value in the range of 50.00 to 210.00 mm. In the right-hand text box, enter a value in the range of 50.00 to 1,000.00 mm.
- Overlap
Set a value in the range of 0 to 100 mm. If a value other than 0 is specified for Overlap, pages are overlapped by a specified width

as they are cut. Use this function to create overlapping margins for alignment when separated parts of an object are put together.

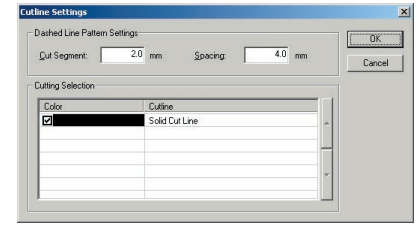
Cutline Settings

..... Calls up the [Cutline Settings] window. In the [Cutline Settings] window, specify any color for the cutline.

Note: For details, please refer to Section 4.8, "Cut Specifications Window".

4.8 Cutline Settings Window

This window is displayed when [Cutline Settings] is clicked on the [Cutting Settings] tab in the [Output Settings] window.



Dashed Line Pattern Settings

..... When thick media such as cardboard is folded, a fold line can be added to facilitate folding. Furthermore, as this is a dashed line, it can also be used as a perforation line.

Note: The fold line is a dashed line. If the fold line is used for thin media, the creased part of the media will become very weak. Therefore, consider the quality and thickness of the media when using this function.

- Cut Line Segment
  Sets the breadth of the cut part of the fold line (dashed line) that is to be cut. Specify it in the range of 0.1 to 100 mm.
- Spacing
  Sets the breadth of the uncut part of the fold line (dashed line) that is to be left uncut. Specify it in the range of 0.1 to 100 mm.

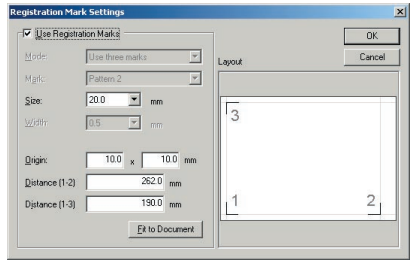
Cutting Selection

..... Select the color of the "Solid Cut Line" or "Dashed Line" Only one type of line can be chosen for each color.

- Color
  Lists the colors of the outer lines of all forms in the data. Because all of the colors used are automatically specified for Solid Cut Line, deselect all other colors, or those that are used for other than Solid Cut Line.
- Cutline
  Select the "Solid Cut Line" or "Dashed Line" to which the listed color is to be applied. Lines in colors that were specified for "Solid Cut Line" will be cut by the Craft ROBO as solid lines. Lines in colors that were specified for "Dashed Line" will be cut by the Craft ROBO as dashed lines. Click in the box below the heading "Cutline". A dropdown list will be displayed. Make your selection from the list.

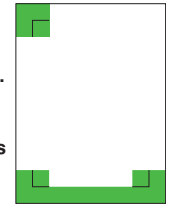
4.9 Registration Mark Settings Window

This window is displayed when "Registration Mark Settings" is chosen from the [Edit] menu.



Note:

- **Registration marks are the alignment marks used to ensure that the positions of the printed image and the cut line match, and they are printed around the image. The registration marks are shaped like the letter "L," and are placed at three locations enclosing the printed image.**
- **When using registration marks, a fixed area around each registration mark is not printed. When registration marks are used, therefore, make sure the object to be printed, such as a picture or character string, does not enter the areas shown in green in the figure. However, cut data is output even for the green parts of the figure.**



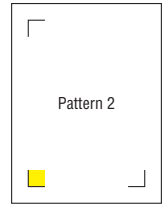
Use Registration Marks
..... Turns the printing of registration marks on or off.

Mode..... Shows the registration-mark mode. The mode is fixed to "Use three marks", and there are no choices that can be selected.

- Use Three Marks
  Reads three registration marks: one each at the lower left, lower right, and upper left corner of the media. "Use Three Marks" provides a high reading accuracy.

Mark..... Shows the shape of the registration marks. The shape is fixed to "Pattern 2", and there are no choices that can be selected.

- Pattern 2 The corner of each registration mark faces the outside of the media. Although Pattern 2 features a wide cutting range, no data can be cut in the regions of the registration marks (tinted yellow in the figure at the right).



Size..... Shows the size of the registration mark (L).

Width ..... Shows the line width of the registration mark.
The line width is fixed to "0.5 mm," and there are no choices that can be selected.

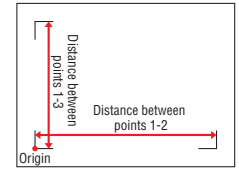
Origin..... Specifies the position of the first registration mark. With respect to the document specified in Document Settings, the position at which the registration mark is to be set can be determined by specifying offsets from the edges of the document. When the Origin is changed, the first registration mark moves to that position, and the second and third registration marks move to the positions determined relative to the first registration mark by adding the "Distance (1-2)" and the "Distance (1-3)." In the left-hand input box, enter an offset value in the horizontal direction of the document; in the right-hand input box, enter an offset value in the vertical direction of the document.

- Distance (1-2) Specify the distance between the first and second registration marks.

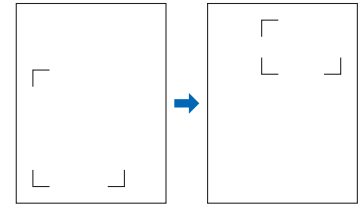
  Note: The distance between registration marks is the distance from the corner of one registration mark to the corner of another.

- Distance (1-3) Specify the distance between the first and third registration marks.

  Note: The distance between registration marks is the distance from the corner of one registration mark to the corner of another.

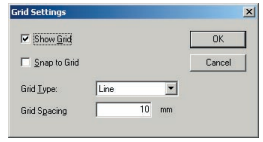


Fit to Document
..... When the first registration mark is moved by changing the "Origin", the second and third registration marks are moved without changing their relative positions with respect to the first registration mark. At this time, if the second or third registration mark reaches the document margin, it is stopped there and the relative distance from the first registration mark is shortened. This action is shown in the layout of the [Registration Mark Settings] window. If the first registration mark is moved and the distance in relation to the second or third registration mark is changed as in this case, click [Fit to Document] to update "Distance (1-2)" and "Distance (1-3)" to the changed values.



4.10 Grid Settings Window

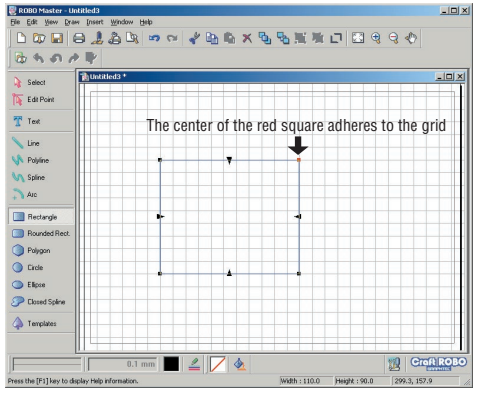
This window is displayed when "Grid Settings" is chosen from the [Edit] menu.



Show Grid..... Shows a grid.
The term "grid" refers to grid boxes or dots displayed on the screen, which serve as a guide for drawing.

Snap to Grid .... When "Snap to Grid" is chosen, forms are drawn or moved in units of grid boxes or dots.

- If you select "Snap to Grid" before drawing a form, the form will be drawn in units of grid boxes or dots.
- If "Snap to Grid" is selected before a form is moved, the center of the red square among the small squares displayed around the selected form is moved along with the grid boxes or dots.

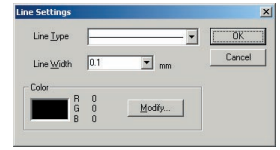


Grid Type ..... Line: Light-gray lines are displayed at equal intervals in the horizontal and vertical directions on the screen.
Dot: Light-gray dots are displayed at equal intervals on the screen.

Grid Spacing.... Sets the grid interval.
Specify it in the range of 1 to 1,000 mm in increments of 1 mm.

4.11 Line Settings Window

This window is displayed when "Line Settings" is chosen from the [Draw] menu. If this window is called up while a form is selected, use it to change the settings of the selected form. If this window is called up while no forms are selected, the default settings of a form created hereafter are changed.



Line Type ..... Select a line type from the list.
Six choices are available for selection: Solid Line, Dotted Line, Dashed Line, Dotted/Dashed Line, Double-Dotted/Dashed Line, and None (the line becomes transparent).

Note: If handled as the cutline, the line type specified here is ignored and the data is cut with a solid line.

Line Width..... Select a line width.
A numeric value can also be entered. Specify it in the range of 0.1 to 50.0 mm.

Note: Line Width can only be specified for Solid Line.

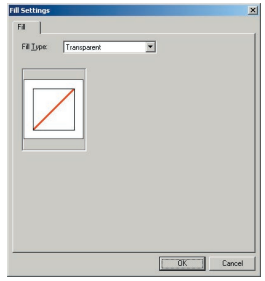
Modify... ..... Calls up the [Color] window to enable specification of the colors of lines.

4.12 Fill Settings Window

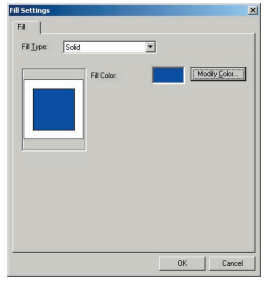
This window is displayed when "Fill Settings" is selected from the [Draw] menu. If this window is called up while a form is selected, use it to change the settings of the selected form. If this window is called up while no forms are selected, the default settings of a form to be created hereafter are changed.

Fill Type ..... Selects a fill pattern.

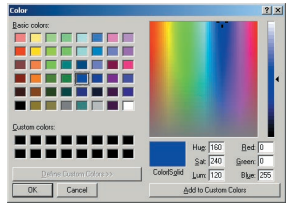
- Transparent
  The form is comprised of outer lines only.



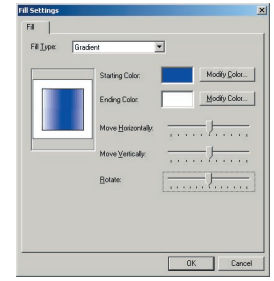
- Solid
  The form is filled with a single color. Click [Modify Color...] to call up the [Color] window, and specify a fill color in that window.



Color Window



- Gradient
  The form is filled with a color gradation.



Starting Color, Ending Color
..... Two colors can be specified: one for the starting and one for the end of gradation. (To specify colors, use the respective [Modify Color...] buttons to call up the [Color] window for the Starting Color and the Ending Color).
The gradation displayed in the window consists of the starting color at the center and the ending color at both ends.

Move Horizontally
..... Sets the degree of gradation in the horizontal direction.
As the slider is moved, the gradation in the window is scrolled to the left or right, depending on the direction of movement of the slider.

Move Vertically
..... Sets the degree of gradation in the vertical direction.
As the slider is moved to the right, the gradation in the window is scrolled upward. As the slider is moved to the left, the gradation in the window is scrolled downward.

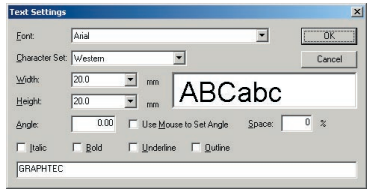
Rotate ..... Sets the rotation of gradation.
As the slider is moved to the right, the gradation in the window rotates to the left. As the slider is moved to the left, the gradation in the window rotates to the right.

4.13 Text Settings Window

This window is displayed when "Text" or "Text Settings" is chosen from the [Draw] menu.

- If "Text Settings" is called up by clicking "Text" in the [Draw] menu, a frame for selecting a character string is displayed. In this case, the specified character string is created in the document according to the settings made in the dialog box.
- If this window is called up by clicking "Text Settings" in the [Draw] menu while a character-string object is selected, use it to change the settings of the selected character-string object.
- If this window is called up by clicking "Text Settings" in the [Draw] menu while no character-string objects are selected, the default settings of a character-string object to be created hereafter are changed.

Note: Shown below is a window called up from "Text" in the [Draw] menu.



Font ..... Specifies the font of the text.

Character Set .. Specifies the character set of the font.
This can normally be disregarded. Some fonts have multiple character sets, allowing different characters to be represented by the selection of a character set.

Width ..... Sets the width of one character.

Note: With some fonts, the character width may differ for each character.

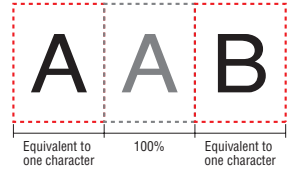
Height ..... Sets the height of one character.

Note: With some fonts, the character height may differ for each character.

Angle ..... Specifies the angle of a character string.

Use Mouse to Set Angle
..... If this checkbox is selected, the angle of a character string can be specified using the mouse after its location is specified at the time of its creation. As the mouse is moved, the placement angle of the character string changes. Left-click at the angle to be entered. At this time, if you hold down the [Shift] key while moving the mouse the angle will change in 45-degree units.

Space ..... Specify the spacing between characters. The spacing should be specified as a percentage (%). To leave a space equivalent to one character, for example, specify 100%.



Specify a number in the range of -50 to 400.

Note: When a proportional font is used, be aware that spaces cannot be left at equal intervals. The term "proportional font" refers to fonts for which the character width differs depending on the character.

Italic ..... Sets the style of characters to "italic".

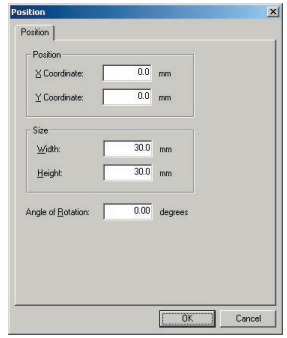
Bold ..... Sets the style of characters to "bold".

Underline ..... Underlines the characters.

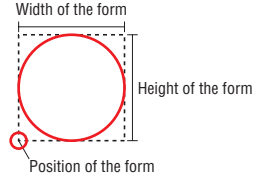
Outline ..... Shows the characters in outline form (with only the outlines of characters displayed).
If this checkbox is selected, Bold and Underline are grayed out and cannot be set.

4.14 Position Window

This window is displayed when "Position Settings..." is chosen from the [Draw] menu. Position can only be chosen when a form is selected, allowing the Position, Size, and Angle of Rotation of the selected form to be set.



Position..... Shows the current position of the selected form using X and Y coordinates. The lower left corner of a circumscribed rectangle drawn around the form is the position of the selected form. Here, the origin exists at the lower left corner of the document. Numeric values for coordinates can be entered directly from the keyboard to determine the position of the form. (If "Select" is selected in the [Draw] menu and the mouse cursor is positioned on the screen, the coordinates of the current mouse cursor position are shown at the lower right part of the screen, for reference purposes).

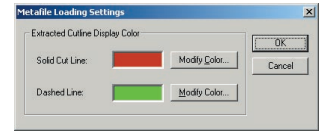


Size..... Shows the size of the selected form by Width and Height. The size is represented by coordinates. While drawing, if the mouse cursor is moved in the direction away from the origin, a "positive" value is displayed. Conversely, if the mouse cursor is moved in the direction toward the origin, a "negative" value is displayed. Numeric values can be entered directly for "Width" and "Height" from the keyboard to determine the size of the form.

Angle of Rotation
..... Shows the angle of rotation of the selected form. This angle is shown in 360 degrees counterclockwise. A numeric value for Angle of Rotation can be entered directly from the keyboard to set the angle of rotation of the form.

4.15 Metafile Loading Settings Window

This window is displayed when "Metafile Settings" is chosen from the [Insert] menu. If the colors in the cut data included with a Windows metafile are the same as the colors of the lines drawn, the colors in the metafile cut data can be changed to ensure that the drawn lines do not become the cut data.

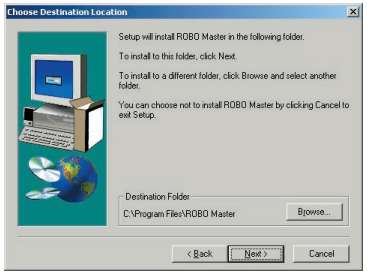


The colors displayed for "Solid Cut Line" and "Dashed Line" in the [Extracted Cutline Display Color] section of the window are the colors currently specified for "Solid Cut Line" and "Dashed Line". To change the colors, click [Modify Color...] in order to display the [Color] window, select the color to be specified for "Solid Cut Line" or "Dashed Line", and then click [OK].

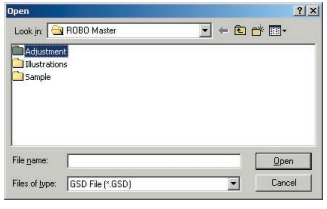
5 Printing the Registration Mark Test Form

This chapter describes the procedure for printing the registration mark test form that is used in the Registration Mark Reading Test of the Craft ROBO.

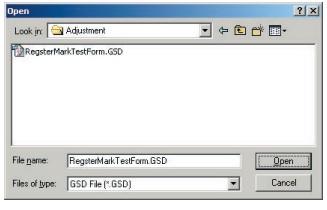
(1) If the ROBO Master in your system was installed without changing the default settings in "Choose Destination Location" and "Destination Folder", the "ROBO Master" folder will have been created in the location shown below.


Choose Destination Location
Setup will install ROBO Master in the following folder.
To install to this folder, click Next.
To install to a different folder, click Browse and select another folder.
You can choose not to install ROBO Master by clicking Cancel to exit Setup.
Destination Folder
C:\Program Files\ROBO Master
Browse...
< Back
Next >
Cancel

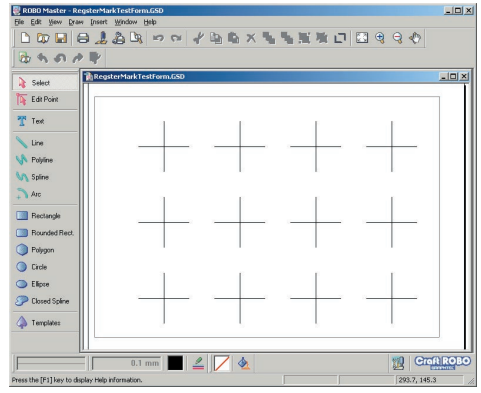
(2) Choose "Open" from the [File] menu of ROBO Master to display the [Open] window. For Look In, select the [ROBO Master] folder confirmed in (1) above.



(3) Select the [Adjustment] folder and click [Open].



(4) Select the [Register Mark Test Form] file, and click [Open]. The "Register Mark Test Form" will be displayed.



(5) In the [Output Settings] window, select the printer to be used for printing and, if necessary, change the "Print Settings". Open the [Output to Printer] window and, after confirming the settings, click [OK] to print the Register Mark Test Form.

Note: Use white, matte, A4-size paper for the Register Mark Test Form. Copy paper or the like may be used. If possible, use the same media as will be used for cutting. This may help increase the accuracy of registration mark reading.

6 Error Messages

A Media Name has not been specified.

- No media names are entered in the [Name] box of the [Specify User Size] window.

⇨ Enter a media name in the [Name] box of the [Specify User Size] window that is displayed by clicking [Specify User Size...] in the [Document Settings] window.

Media Name ### has been reserved, and cannot be used.

- The media name entered in the [Name] box of the [Specify User Size] window is already in use.

⇨ Enter a new name in the [Name] box of the [Specify User Size] window. A media name can be registered only once.

cannot be used as a Media Name.

- The media name entered in the [Name] box of the [Specify User Size] window contains unusable characters.

⇨ Commas (,) cannot be used in the [Name] box of the [Specify User Size] window. Enter a new name.

Includes characters that cannot be used with the current font. Please change the font.

- The character string entered in the [Text Settings] window is not supported by the current font or character set.

⇨ Specify the corresponding font or character set for the character string entered in the [Text Settings] window.

Failed to launch the browser.

- This message is displayed when the Internet browser could not be started up normally.

⇨ Make sure your system is connected to the Internet.

The overlap width exceeds the tiled plot area.

- The value specified for "Overlap" in Tiling is greater than the width or height of the Media Size.

⇨ Check whether Tiling on the [Cutting Settings] tab of the [Output Settings] window is set properly. If it is not, correct the setting.

The registration mark positions are outside the specified document area.

- The registration mark positions are outside the specified document area.

⇨ Check Layout in the [Registration Mark Settings] window, and correct the registration mark positions so that they will not extend past the document area.

There is an error in the file contents.

- An error occurred when a DXF-format file was loaded. The file may not be a DXF file.

⇨ Load the DXF file using the software with which it was created, and check the data.

No valid data.

- The DXF file contains no data that can be handled by ROBO Master.

⇨ The data in this file cannot be used.

This file format is not supported.

- The DXF file does not contain data that can be handled by ROBO Master.

⇨ This data cannot be used.

File loading aborted.

- The [ESC] key on the keyboard was pressed while a saved of ROBO Master file was being loaded.

⇨ Do not press the [ESC] key until the system finishes loading the file.

A file cannot be created.

- This message is displayed when, for example, the system has failed to rewrite over an existing file.

⇨ Remove write protection before saving, or save the data under another name.

Cannot write to file.

- This message is displayed when, for example, there is insufficient space on the hard disk.

⇨ Check the available space at the destination to which you are saving.

Initialization failed. Cannot output.

- The printer driver for printing cannot be used.

⇨ Check whether the device is connected.

Output failed.

- This message is displayed when data could not be output to the Craft ROBO normally.

⇨ Check to confirm that the Craft ROBO is connected properly and that its standby switch is turned on.

Output aborted.

- The [Abort…] button on the "Craft ROBO Controller" was pressed during cutting.

⇨ To perform cutting, click the [Cut...] button on the "Craft ROBO Controller".

Craft ROBO controller startup failure.

- The Craft ROBO Controller could not be invoked.

⇨ Check to confirm that the "Craft ROBO Controller" is installed in your system. If the "Craft ROBO Controller" is not installed, install it using the CD included with the Craft ROBO.

Cannot find the Craft ROBO driver. Please install the driver.

- The "Craft ROBO Driver" is not installed.

⇨ Install the "Craft ROBO Driver" using the CD included with the Craft ROBO.

Twain Errors

An error occurred in the TWAIN device.

- An error occurred in the TWAIN device selected in the Model Setup dialog box.

⇨ Check the TWAIN device's connections.

Loading was aborted.

- The [ESC] key on the keyboard was pressed during the loading of an image file.

⇨ Do not press the [ESC] key until the system finishes loading the file.

The specified image is not supported.

- The TWAIN device output a file format that cannot be read in this software.

⇨ In the TWAIN device settings, set it up to output a bilevel image, an 8-bit grayscale or color image, or a 24-bit color image.

File Loading Errors

This file format is not supported.

- Loading of a file format that is not supported was attempted.

⇨ The file specified cannot be loaded.

The header information contains an error.

- The file header information contains an error.

⇨ The file specified cannot be loaded.

The file was incorrectly compressed.

- The file format to be loaded contains an error.

⇨ The file specified cannot be loaded.

Tile-divided files cannot be read.
Files compressed using LZW cannot be read.
CALS Type 2 files cannot be read.
Files compressed using CCITT 2D cannot be read.
INTERGRAPH Uncompressed files cannot be read.
INTERGRAPH RLE files cannot be read.

- The preceding error messages appear if you attempt to load a file with a file format not supported by ROBO Master.

⇨ The file specified cannot be loaded.

Failed to update the image. The image cannot be rotated.

- This message is displayed during the rotation of an image. More specifically, it is often displayed when the available space in memory or on the hard disk is insufficient.

⇨ Terminate other active software and delete unnecessary files in order to increase the available space on the hard disk.

Cannot load the specified Metafile.

- This message is displayed when loading of a metafile-format file not supported by ROBO Master is attempted.

⇨ The system cannot load the specified file.

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The specifications, etc., in this manual are subject to change without notice.

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